Course Information UPDATED:

Professor: Christine Kirchhoff, P.E., Ph.D.
Find me: Email: Christine.Kirchhoff@uconn.edu (when you email me, please include ENVE 1000 in subject line)
TA: Berdakh Utemuratov
Find Berdakh: Email, berdakh.utemuratov@uconn.edu
UA: Lauren King
Find Lauren: Email, lauren.a.king@uconn.edu

Course Format: Online lectures and discussion each week
Lectures: will be recorded and posted online – likely through TopHat with embedded questions
Discussions: will be online adapted to fit course materials each week
Office Hours: Prof. Kirchhoff, email for virtual appt.
Berdakh Utemuratov, email for virtual appt.

Course Philosophy (NO CHANGE):

The overarching goal of this course is for students to begin a cognitive assessment of their own personal philosophies of ‘environmental sustainability’. Achieving a greater degree of environmental sustainability requires making educated choices. These choices, both personal and societal, can be guided by quantitative tools to assess environmental impacts (e.g. lifecycle analysis to consider resources used and wastes generated) and by the implementation of social or economic policies; however, the decision paths followed are guided implicitly by individuals’ and society’s choices, philosophies, and values.

Course Description (NO CHANGE):

Detailed examination of anthropogenic impacts on the environment, resulting from the need for energy, food and shelter. Subtopics in the broad areas of energy, food and shelter will be grounded with case studies of UCONN activities/programs in sustainability as well as case studies of examples of urban and corporate sustainability efforts here in the US and abroad. Resolution of scientific/technological, public policy and economic aspects of environmental sustainability problems, including strategies for success, and possible pitfalls, in achieving environmental sustainability in the subtopic areas. This course fulfills general education requirements for area 2 (CA2) and for Environmental Literacy.

Course Objectives (NO CHANGE):

At the completion of the course, students will be able to:
(i) use correctly the language of environmental sustainability, including physical science, technology, public policy, economics and sociology, thereby becoming articulate about environmental sustainability;
• readings
• discussion assignments and tours – remember and understanding definitions
• homeworks
• exams
(ii) identify interconnections between specific human activities/lifestyles and impacts upon the natural environment, thereby acquiring intellectual breadth in scientific/technological, public policy, and economic facets
ENVE 1000 Environmental Sustainability
Spring 2020

of sustainability;
• readings
• discussion assignments – comprehension
• homeworks - data analysis
(iii) conduct necessary background library research to discuss a given environmental issue, thereby acquiring skills to continue acquisition and use of knowledge, particularly through composition of supported viewpoint papers;
• homeworks - data analysis
(iv) perform critical evaluation of environmental problems using reasoned judgment and logical arguments, thereby acquiring critical judgment about environmental sustainability;
• discussion & homework assignments
(v) demonstrate moral sensitivity about global societies and future generations, thereby acquiring awareness of their era and society regarding global climate change and environmental degradation through all topics and increasing awareness of cultural diversity ; and
• discussion & homework assignments
(vi) work effectively in groups with members from different disciplinary backgrounds, thereby increasing intellectual breadth and diversity awareness.
• discussion assignments

Course Topics (NO CHANGE):

Wk 1: Overview – What is sustainability?
• Sustainability definitions; sustainability science
• Recognize system boundaries
Wk 2 – 4: Energy & Climate
• Understand the difference between weather and climate
• Explain the connection between energy generation and climate change
• Examine different methods of electrical power generation
• Examine economic, policy and other drivers to promote adoption of more sustainable practices
• Analyzed different actions and their impact on climate
Wk 5 - 7: Water & Ecosystems
• Understand water cycle, uses, and sustainability challenges
• Understand virtual/embedded water concept
• Learn and apply water footprint
• Understand mechanisms to address water sustainability challenges and difficulty of accounting for environment or equity issues
Wk 8 - 10: Food Systems
• Understand food systems and sustainability challenges
• Analyze sustainability concepts in organic vs. local food
• Understand mechanisms to address food system sustainability challenges
Wk 11-13: Urban Systems
• Describe patterns of land use
• Identify why development patterns are not sustainable
• Compare and contrast low impact design elements
• Examine public policy drivers to promote more sustainable development practices
Wk 14: Wrap-up
ENVE 1000 Environmental Sustainability  
Spring 2020  

COURSE POLICIES  

Class Preparation UPDATED:
Textbook readings are listed on the course schedule. The textbook is free and is available (see Textbook Resources next page). Additional materials referenced in recorded lectures will be posted on HuskyCT. Slides will be posted on HuskyCT under the appropriate week/section and within the lecture folder for that week. Lectures will be named by the week # and lecture #: To the extent possible, weekly lecture and discussion materials will be made available on HuskyCT by Monday each week.

Policy for Late or Missed Assignments UPDATED:
For full credit, assignments must be turned in by the due date at the specified time on HuskyCT. Late assignments will be penalized 20% for each day late past the due date. Given the global pandemic, I expect students may need additional time to turn in assignments. If that is the case, email me and cc: Lauren and Berdakh that you need additional time so everyone is on the same page.

Plagiarism (NO CHANGE):
All work that students present in this course must be their own. It is permissible to use arguments made by others or available data to support a position; however, this should be limited to short passages and proper credit must be given to the original author. Presenting others work as your own violates the University of Connecticut code on plagiarism and requires that actions be taken which may include dismissal from the university. More information about plagiarism can be found at: https://lib.uconn.edu/services/ask/get-help/writing/plagiarism-resources/. The University of Connecticut policy on Academic Misconduct is contained within the Student Code: https://community.uconn.edu/the-student-code-appendix-a/

Student Conduct (NO CHANGE):
As members of the University community, students have an obligation to uphold The Student Code including adhering to the highest standards of academic integrity and personal and interpersonal conduct. I expect all students will refrain from engaging in behaviors (e.g., disruptive, harming, endangering, etc.) that violate The Student Code or the Academic Integrity in Undergraduate Education and Research policy.

Other Helpful Sources of Information UPDATED:
Division of Student Affairs - https://studentaffairs.uconn.edu  
Center for Students with Disabilities to arrange academic accommodations – https://csd.uconn.edu  
Counseling and Mental Health Services - 234 Glenbrook Road, 860-486-4705  
   For immediate help, request an “on-call therapist”  
   http://counseling.uconn.edu/  
Beginning Monday 3/23/20 through the end of the semester, SHAW-Mental Health will be moving to exclusively telehealth (online) or phone platforms for providing services to students. We ask that students call our office at 860-486-4705 before walking to the office.  
https://suicideprevention.uconn.edu  
Sexual violence, domestic violence and stalking awareness support - http://titleix.uconn.edu/

COVID-19 RESOURCES
UConn Health has opened a COVID-19 Call Center to address questions and concerns related to coronavirus. It is open from 8 a.m. to 5 p.m. weekdays and is available to UConn employees, patients, students, and the community. Questions and concerns can be directed to 860-679-3199.  
The university has a webpage for COVID-19 Updates. https://uconn.edu/public-notification/coronavirus/
COURSE MATERIALS, DELIVERABLES AND DUE DATES

**Top Hat Classroom Response System UPDATED:**

We will still use Top Hat (www.tophat.com) for Asynchronous Teaching which will enable the familiar lecture interspersed with questions format we used in our regular lectures. I will assign lectures as an assignment in TopHat. We’ll troubleshoot as needed as we roll this out.

You can visit the Top Hat Overview (https://success.tophat.com/s/article/Student-Top-Hat-Overview-and-Getting-Started-Guide) within the Top Hat Success Center which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system. An email invitation will be sent to you by email, but if don’t receive this email, you can register by simply visiting our course website: https://app.tophat.com/e/037356 and using Join Code **037356**. Don’t worry if you don’t see any content in the course right away. Content will be made available as we progress through the semester.

Top Hat requires a paid subscription, and a full breakdown of all subscription options available can be found here: www.tophat.com/pricing.

Should you require assistance with Top Hat at any time, due to the fact that they require specific user information to troubleshoot these issues, please contact their Support Team directly by way of email (support@tophat.com), the in app support button, or by calling **1-888-663-5491**.

**Textbook and Readings (NO CHANGE):**

We use a free textbook Theis and Tomkin (Eds) 2012. *Sustainability: A Comprehensive Foundation*, available online at: https://cnx.org/contents/F0Hv_Zza@45.1:HdWd2hN5@2/Foreword. Readings are noted on the course schedule and HuskyCT. Other readings and materials will be posted to HuskyCT.
Course Work and Due Dates UPDATED:

PRE-SPRING BREAK up to 52.5 points earned out of 100

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Description</th>
<th>Pts</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Th/F Discussion Tours 4 of 10 points</td>
<td>Cogen</td>
<td>2</td>
<td>Attend tours, turn in sheets at end of tour</td>
</tr>
<tr>
<td></td>
<td>RWF</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dining</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Green-Bldgs</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stormwater</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Th/F Discussion 14 of 17 points</td>
<td>#1 Motivation</td>
<td>3</td>
<td>Attend discussion, turn in write up at end of class</td>
</tr>
<tr>
<td></td>
<td>#2 EcoFootprint</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#3 Flint</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#4 SVSF</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#5 Compare</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Assignments for M/W Lectures including Homeworks

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Description</th>
<th>Pts</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework 16 of 32 points</td>
<td>#1 – C-LEARN</td>
<td>8</td>
<td>Feb. 12</td>
</tr>
<tr>
<td></td>
<td>#2 – Ftprints</td>
<td>8</td>
<td>Mar. 4</td>
</tr>
<tr>
<td></td>
<td>#3 – Food</td>
<td>8</td>
<td>Apr. 1</td>
</tr>
<tr>
<td></td>
<td>#4 – Sustainable Communities</td>
<td>12</td>
<td>Apr. 22</td>
</tr>
<tr>
<td></td>
<td>#5 of 7 points</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| | | \[
\begin{array}{ccc}
\text{Lecture} & \text{Points} & \text{Due} \\
\hline
\text{Top Hat} & 3.5 & M/W lectures \\
\end{array}
\]|

Exams 15 of 30 points

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Description</th>
<th>Pts</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exam 1</td>
<td>15</td>
<td>Mar. 9</td>
</tr>
<tr>
<td></td>
<td>Exam 2</td>
<td>15</td>
<td>Apr. 29</td>
</tr>
</tbody>
</table>

Total = 100 points possible – So far up to 52.5 points earned

POST-SPRING BREAK up to 47.5 points remaining

Remaining Homeworks

<table>
<thead>
<tr>
<th>Homework #</th>
<th>Assignment Description</th>
<th>Points</th>
<th>Due 2 Wednesdays at Midnight</th>
</tr>
</thead>
<tbody>
<tr>
<td>HW #3</td>
<td>Food – Hunger</td>
<td>8</td>
<td>April 1, 11:59 pm</td>
</tr>
<tr>
<td>HW #4</td>
<td>Sustainable Cities</td>
<td>8</td>
<td>April 22, 11:59 pm</td>
</tr>
</tbody>
</table>

Remaining TopHat

<table>
<thead>
<tr>
<th>Week</th>
<th>Assignment Description</th>
<th>Points</th>
<th>Due Fridays at Midnight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly</td>
<td>Embedded in videos</td>
<td>3.5</td>
<td>March 26, April 2, 9, 16</td>
</tr>
</tbody>
</table>

Remaining Weekly Discussions

<table>
<thead>
<tr>
<th>Week</th>
<th>Assignment Description</th>
<th>Points</th>
<th>Due Sundays at Midnight!</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>UCONN Dining</td>
<td>3.25</td>
<td>3/29, 11:59pm</td>
</tr>
<tr>
<td>10</td>
<td>HW#3 Discussion</td>
<td>3.25</td>
<td>4/5, 11:59 pm</td>
</tr>
<tr>
<td>11</td>
<td>Old Discussion #5</td>
<td>3.25</td>
<td>4/12, 11:59 pm</td>
</tr>
<tr>
<td>12</td>
<td>UCONN Stormwater</td>
<td>3.25</td>
<td>4/19, 11:59 pm</td>
</tr>
</tbody>
</table>

Remaining Exam

<table>
<thead>
<tr>
<th>Week</th>
<th>Assignment Description</th>
<th>Points</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Exam 2 Administered Online</td>
<td>15</td>
<td>Wednesday, April 29</td>
</tr>
</tbody>
</table>

Total = 47.5 points possible
## ENVE 1000 Environmental Sustainability
### Spring 2020

## PRE-SPRING BREAK COURSE SCHEDULE

<table>
<thead>
<tr>
<th>Week # Start Date</th>
<th>Textbook Readings</th>
<th>Monday Lecture</th>
<th>Wednesday Lecture</th>
<th>Discussion (Th/F/F)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overview – What is Sustainability?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Week 1 Jan 20</strong></td>
<td>N/A</td>
<td>Do <strong>not</strong> meet in-class this week (No Lecture/No Discussion this week). <strong>Do watch</strong> three (3) brief introductory videos and <strong>complete</strong> On-line Discussion #1: Motivation due Friday, Jan. 24.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Energy &amp; the Changing Climate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **Week 2 Jan 27** | Ch. 1  
Ch. 3, pgs. 50-63, 76-88, 98-115  
Ch. 8, pgs 303-308, 337-351, 384-399 | Broad overview & history of energy system; challenge of scale  
A changing climate – future projections and mitigation; Climate system momentum | Energy – climate connection; Overview of climate system & GHGs  
HW #1: C-LEARN intro | UCONN Tour – Cogen Facility - CONFIRMED  
Meet at Central Utility Plant 1st Floor Classroom  
Introduce HW#1 and Discuss Background Materials and Strategies  
Watch Environmental Footprint Video Discussion #2: Ecological Footprint |
| **Week 3 Feb. 3** | Ch. 8, pgs 303-308, 337-351, 384-399 | Guest Speaker: Richard Miller  
UConn OEM, Climate Action Plan - CONFIRMED | Wrap-up and Discuss HW #1  
HW #1 Due | |
| **Week 4 Feb. 10** | Ch. 4, pgs 117 - 134  
Ch. 5, pgs 151 – 179, 184 - 209 | Broad overview of water/ecosystems challenges  
Efforts to mitigate challenges – applications/tools | Efforts to mitigate challenges – theory  
HW #2: Water Footprint | UCONN Tour – Water Reclamation Facility - CONFIRMED  
48 LeDoyt Road Extension, meet at WRF  
Introduce Flint Water Crisis and begin Discussion #3: Flint Water Crisis  
Wrap-up and Discuss HW #2  
Review for Exam 1  
HW #2 Due  
Conclude Discussion #3 |
<p>| <strong>Water and Ecosystems</strong> | | | | |
| <strong>Week 5 Feb. 17</strong> | | | | |
| <strong>Week 6 Feb. 24</strong> | | | | |
| <strong>Week 7 Mar. 2</strong> | | | | |</p>
<table>
<thead>
<tr>
<th>Week # Start Date</th>
<th>Textbook Reading</th>
<th>Monday Lecture</th>
<th>Wednesday Lecture</th>
<th>Discussion (Th/F/F)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food Systems</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Week 8</strong></td>
<td>Mar. 9</td>
<td>Ch. 4, pgs 135-147</td>
<td><strong>Exam 1</strong></td>
<td><strong>Guest Speakers: Student Farmers from UConn Spring Valley Student Farm – CONFIRMED</strong></td>
</tr>
<tr>
<td></td>
<td>Spr. Brk.!</td>
<td>Ch. 10, pgs 501-502, 506-508</td>
<td>Broad overview of system and challenges <strong>HW #3 Food</strong></td>
<td><strong>Discussion #4: Reflect SVSF</strong></td>
</tr>
<tr>
<td><strong>Week 9</strong></td>
<td>Mar. 23</td>
<td>Efforts to mitigate challenges – theory</td>
<td><strong>Guest Speaker: Michael White, Asst. Director UConn Dining Services CANCELLED</strong></td>
<td><strong>UCONN Tour – Dining Services – CANCELLED – replaced with online video &amp; discussion TBD</strong></td>
</tr>
<tr>
<td><strong>Week 10</strong></td>
<td>Mar. 30</td>
<td>Efforts to mitigate challenges – applications/tools</td>
<td>Discuss HW#3 and Wrap up Food Systems <strong>HW #3 Due</strong></td>
<td>Weekly discussion due</td>
</tr>
<tr>
<td><strong>Urban Systems: Green Building &amp; Livable Cities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Week 11</strong></td>
<td>Apr. 6</td>
<td>Broad overview of system and challenges <strong>HW#4: Sust. Communities</strong></td>
<td>Efforts to mitigate challenges</td>
<td><strong>UCONN Tour – Green Buildings and LID CANCELLED</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Guest Speaker: Carol Atkinson-Palombo, Associate Professor, Department of Geography, Director of Environmental Studies - CONFIRMED</strong></td>
<td></td>
<td>Replacement discussion planned</td>
</tr>
<tr>
<td><strong>Week 12</strong></td>
<td>Apr. 13</td>
<td>Efforts to mitigate challenges</td>
<td>Efforts to mitigate challenges</td>
<td><strong>Discussion #5: Compare and Contrast</strong></td>
</tr>
<tr>
<td><strong>Week 13</strong></td>
<td>Apr. 20</td>
<td><strong>Guest Speaker: Carol Atkinson-Palombo, Associate Professor, Department of Geography, Director of Environmental Studies - CONFIRMED</strong></td>
<td>Discuss HW#4 and Wrap up Urban Systems <strong>HW #4 Due</strong></td>
<td><strong>UCONN Tour – Stormwater Management CANCELLED – replaced with online video &amp; discussion</strong></td>
</tr>
<tr>
<td><strong>Wrap-up</strong></td>
<td></td>
<td>Wrap up &amp; Review for Exam</td>
<td>Exam 2 – TBD delivery</td>
<td>No discussion this week. No FINAL EXAM. Good luck with finals and enjoy your summer!</td>
</tr>
<tr>
<td><strong>Week 14</strong></td>
<td>Apr. 27</td>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# ENVE 1000 Environmental Sustainability
## Spring 2020

### POST-SPRING BREAK ADJUSTED COURSE SCHEDULE

<table>
<thead>
<tr>
<th>Week # Start Date</th>
<th>Textbook Reading</th>
<th>Online Lectures</th>
<th>Discussion (Th/F/F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spr. Brk.!</td>
<td>Ch. 4, pgs 135-147</td>
<td><strong>Enjoy Spring Break (March 15 – 21)</strong></td>
<td></td>
</tr>
</tbody>
</table>
| **Week 9** Mar. 23 | Ch. 10, pgs 501-502, 506-508 | Week 9 will focus on food waste and how to mitigate it. | Sustainable UCONN Dining Services  
Online video & discussion  
Due Sunday, March 29, 11:59pm |
| **Week 10** Mar. 30 | Ch. 11, pp. 525-547 | Week 10 will focus on unsustainable vs. sustainable agricultural production  
**HW #3 Due – Wednesday, April 1, 11:59pm** | **HW#3 Discussion Board**  
Due Sunday, April 5, 11:59pm |

### Urban Systems: Green Building & Livable Cities

| Week 11 Apr. 6 | Week 11 will introduce urban systems and challenges to sustainability  
**HW#4: Sust. Communities will open April 6, 2020** | Discussion #5  
Due Sunday, April 12, 11:59pm |                      |
| **Week 12** Apr. 13 | Ch. 11, pp. 525-547 | Week 12 will focus on green building and low impact design | Sustainable UCONN Stormwater Management  
Online video & discussion  
Due Sunday, April 19, 11:59pm |
| **Week 13** Apr. 20 | **Guest Speaker: Carol Atkinson-Palombo, Associate Professor, Department of Geography, Director of Environmental Studies - CONFIRMED – moved online and will be pre-recorded**  
Release Exam Study Guide  
**HW #4 Due – Wednesday, April 22, 11:59pm** | Collaborate Session for Review (recorded for those who can’t make it) |                      |

### Wrap-up

| Week 14 Apr. 27 | None | Exam 2 – Online delivery Wednesday, April 29 |                      |